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10/531,054

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Andrei Majidian

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NIXON & VANDERHYE, PC  
901 NORTH GLEBE ROAD, 11TH FLOOR  
ARLINGTON, VA 22203

EXAMINER

FERNANDEZ RIVAS, OMAR F

ART UNIT

PAPER NUMBER

2129

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/531,054	<b>Applicant(s)</b> MAJIDIAN, ANDREI	
	<b>Examiner</b> OMAR F. FERNANDEZ RIVAS	<b>Art Unit</b> 2129	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 11 August 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-7 and 9-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 and 9-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 August 2008 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

1. This Office Action is in response to an AMENDMENT filed by the Applicant entered on December 21, 2007.
2. The Office Action of August 21, 2007 is incorporated into this Final Office Action by reference.

### ***Status of Claims***

3. Claims 1-7 and 9-15 have been amended. Claim 8 has been cancelled. Claims 1-7 and 9-15 are pending on this application.

### ***Claim Objections***

4. In light of the amendments made to claims 6-8, 14 and 15, the objection to these claims has been withdrawn.
5. The Applicant is advised to revise the claims. It is noted that in some instances the claims recite "system operating rules" and in other instances they recite "system rules" or "rules" (see for example claims 1, 2, 4, 5, 10). All of the claims should reference these rules using the same term.
6. Claims 4 and 12 are objected to because of the following informalities:

### **Claims 4 and 12**

The claims above are independent claims that reference the limitations of another independent claim. For example, independent claim 4 references the limitations of independent claim 1. This referencing makes it difficult to keep track of the limitations in the independent claims and understanding the claimed invention. For the

sake of clarity, the Applicant is advised to duplicate the limitations of claim 1 into claim 4 accordingly instead of referencing the limitations between independent claims.

**Appropriate correction is required.**

### **Response to Applicant's arguments**

7. The Applicant's arguments regarding the objection to claims 4 and 12 have been fully considered but are not persuasive.

#### **In reference to Applicant's arguments on page 11:**

In response to continued objection to claims 4 and 12 as being improperly dependent (or independent), these claims have been amended above to be in more traditional dependent format so as to obviate the Examiner's grounds for objection. These claims are clearly proper dependent claims in accordance with all statutory and regulatory requirements.

#### **Examiner's response:**

As written the claims are in improper dependent form for failing to further limit the subject matter of a previous claim.

Regarding claim 4, the claim recites: "A method of identifying conflicts in an initial set of system operating rules using the method of claim 1, wherein said method further comprises...." Note that this claim depends on the limitations of claim 1 and further seem to provide limitations to the method of claim 1. Moreover, the claim seems to be directed to a method of using a method.

Regarding claim 12, the claim recites: “A system for identifying conflicts in a set of system operating rules as in claim 9 further comprising means for ...” As written it claim 12 depends on the limitations of claim 9, and further seem to limit claim 9.

Applicant must understand that claims are not just words listing out invention elements...they are limitations that define the fundamental claim scope. Although an essential purpose of the examination process is to determine whether or not the claims define an invention that is both novel and nonobvious over the prior art, another essential purpose of patent examination is to determine whether or not the claims are precise, clear, correct, and unambiguous. The uncertainties of claim scope should be removed, as much as possible, during the examination process.

### ***Claim Rejections - 35 USC § 112***

8. In light of the amendments made on claim 3 and 11, the rejection under 35 USC 112 has been withdrawn.
9. Claims 1-5, 10 and 12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

### **Claims 1 and 5**

The claim recites: “...the available command **portions**”. There is insufficient antecedent basis for this limitation in the claims.

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### **Claims 2, 10**

The claim recites “each stored rule...”. There is insufficient antecedent basis for this limitation in the claim. Note that in claims 1 and 9 “rule data” is being stored.

### **Claim 3**

The claim recites: “...the expanded set of initial rules...” There is insufficient antecedent basis for this limitation in the claim, since there is set of initial rules described in claim 1.

### **Claim 4**

The claim recites: “wherein said method further comprising...” It is not clear to what method the claim is referring to (is it the method of claim 4 or the method of claim 1).

Also the claim recites: “the expanded set of initial rules” There is insufficient antecedent basis since there is no description in claim 4 or claim 1 of an expanded set of initial rules.

### **Claim 5**

The claim recites “...the resolved expanded set of initial rules” There is insufficient antecedent basis for this limitation in the claim.

## **Claim 12**

The claim recites: “the expanded set of initial rules” There is insufficient antecedent basis for this limitation in the claim.

### ***Claim Rejections - 35 USC § 101***

10. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-6 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. For a method (or process) claim to be statutory under 35 USC 101, the method must be tied to another statutory class (such as a particular apparatus) or transform underlying subject matter (such as an article or materials) to a different state or thing. Therefore, the claim must positively recite the apparatus that accomplishes the method steps or positively recite the subject matter that is being transformed.

Claims 1-3 4, 5, and 9-13 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The computer system must set forth a practical application of judicial exception to produce a real-world result. Benson, 409 U.S. at 71-72, 175 USPQ at 676-77. The invention is ineligible because it has not been limited to a substantial practical application.

For a claimed invention to be statutory the claimed invention must produce a useful, concrete, and tangible result. As the Supreme Court has made clear, “[a]n idea of itself is not patentable,” *Rubber-Tip Pencil Co. v. Howard*, 20 U.S. (1 Wall.) 498, 507

(1874); taking several abstract ideas and manipulating them together adds nothing to the basic equation. In re Warmerdam, 31 USPQ2d 1754 (Fed. Cir. 1994).

For a claimed invention to be statutory under 35 U.S.C. 101, the claims must provide a tangible result, and there must be a practical application, by either: 1) transforming (physical thing) or 2) by having the FINAL RESULT (not the steps) achieve or produce a useful (specific, substantial, AND credible), concrete (substantially repeatable/non-unpredictable), AND tangible (real world/non-abstract) result.

A claim that recites a computer that solely calculates a mathematical formula is not statutory.

In the present case, claim 1 describes a method for identifying conflicts in a set of system operating rules. However, the claim fails to produce a useful result because the claimed subject matter fails to sufficiently reflect at least one practical utility set forth in the descriptive portion of the specification. **The claim must produce a practical application** if there is only a transformation of signals or data inside a computer or if a process merely manipulates concepts or converts one set of numbers into another.

What is the practical application of “comparing rules”?

The claim also fails to produce a tangible result because the claimed subject matter fails to produce a result that is limited to having real world value rather than a result that may be interpreted to be abstract in nature as, for example, a thought, a computation, or manipulated data. More specifically, the claimed subject matter provides for identifying rules for which a conflict occurs. Since no further processing is performed on this result, this produced result remains in the abstract and, thus, fails to



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achieve the required status of having real world value. This identification could be nothing more than producing data which is useless in a real world situation absent a particular substantial application. Simply producing data without providing it to a device that can make use of that data is not a practical and tangible result since data alone has no physical structure and does not itself perform any useful, concrete and tangible result.

Claims 2-3 further limit claim 1, but fail to cure the deficiencies set forth above and are rejected on the same basis.

Claims 4, 5 and 9-13 recite limitations similar to that of claims 1-3 and are rejected on the same basis.

### ***Claim Rejections - 35 USC § 102***

11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

12. Claims 1-2, 4-8 ,9-10 and 12-15 are rejected under 35 U.S.C. 102(b) as being anticipated by Moriconi et al. (US PG PUB#2001/0007133, referred to as **Moriconi**)

#### **Claims 1 and 9**

Moriconi anticipates a method of identifying conflicts in a set of system operating rules (**Moriconi**: abstract; pg 2, pars. 14, 21-22; pg. 3, par. 44; ; pgs. 4-5, pars 58-62; pg. 7, pars 92-93; Examiner's Note (EN): item 18 applies. The policies are sets of

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system operating rules. Denying or granting access based on evaluation of the rules is identifying “conflicts”), said method comprising: a) storing rule data representing a set of **one or more** system operating rules, each rule comprising **at least one** system command (**Moriconi**: pg. 2, pars 21-22; pgs 3-4, pars 43-57; pg. 5, pars 64-65; pg. 6, par 77; EN: item 18 applies. Since rule data has not been defined in the claim, any data stored relating to a rule is “rule data”. Objects or privileges are considered “system commands”); b) receiving semantic data representing a graph structure of hierarchical semantic relationships between available system commands, including those in the set of system operating rules (**Moriconi**; pg. 2, pars 21-22; pgs. 3-4, pars 45-57; pg. 5, pars. 59-62 and 67-70; pg. 6, par 82; pg. 7, pars 92-93; EN: the privileges given to a user and privilege inheritance are the semantic data and the objects are the system commands. As understood from pg. 16, L13 to pg. 17, L2 of the specification of the instant application, the hierarchy represented in the graph tells if the user has permission to perform a task); c) expanding the system operating rules according to the allowable hierarchical semantic relationships between the available system command portions, to give, for any particular system operating rule, an additional system operating rule for each hierarchical semantic level in the graph structure below the system command present in the particular rule (**Moriconi**: pgs 3-4, pars. 44-58; pg. 5, pars 59-63; pg. 7, pars 92-93; EN: item 18 applies. Expanding not further defined. Evaluating the constraints (additional system operating rules) after a rule has been validated); and d) comparing the expanded system rules to identify those rules for which a semantic conflict occurs therebetween (**Moriconi**: pgs 3-4, pars. 44-58; pg. 5, pars

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59-63; pg. 6, par 77; pg. 7, pars 92-93; EN: evaluating the rules and the constraints to determine if access should be granted).

### **Claims 2 and 10**

Moriconi anticipates each stored rule comprises a subject portion identifying **one or more** system users, a system command portion identifying the system command to which the rule relates, and an object portion identifying one or more system objects to which the rule applies (**Moriconi**: pgs. 3-4, pars. 44-58; pg. 5, par. 67); and when any of the system rules identify **more than one** system user in the subject portion, **and/or** more than one system objects in the object portion, then expanding such rules to produce replacement rules having a single system user in the subject portion, and a single system object in the object portion, said replacement rules being produced before the expansion step c) is performed (**Moriconi**: pgs. 3-4, pars. 44-58; pg. 5, pars 59-62 and 67; EN: item 18 applies. Granting access to users using roles).

### **Claims 4 and 12**

Moriconi anticipates a method of generating a set of system operating rules from an initial set of system operating rules, and: identifying conflicts in the initial set of system operating rules using the method of claim 1 (see rejection of claim 1 above); wherein said method further comprises: (e) resolving any identified conflicts in the expanded set of initial rules to give a resolved expanded set of system operating rules (**Moriconi**: pgs. 5-6, pars 67-73; pg. 6, par. 82; pg. 7, pars. 88-93).

### Claim 5

Moriconi anticipates a method of identifying conflicts in a set of system operating rules (**Moriconi**: abstract; pg 2, pars. 14, 21-22; pg. 3, par. 44; ; pgs. 4-5, pars 58-62; pg. 7, pars 92-93; Examiner's Note (EN): item 18 applies. The policies are sets of system operating rules. Denying or granting access based on evaluation of the rules is identifying "conflicts"), said method comprising: a) storing rule data representing a set of one or more system operating rules, each rule comprising at least one system command (**Moriconi**: pg. 2, pars 21-22; pgs 3-4, pars 43-57; pg. 5, pars 64-65; pg. 6, par 77; EN: item 18 applies. Since rule data has not been defined in the claim, any data stored relating to a rule is "rule data". Objects or privileges are considered "system commands"); b) receiving semantic data representing a graph structure of hierarchical semantic relationships between available system commands, including those in the set of system operating rules (**Moriconi**; pg. 2, pars 21-22; pgs. 3-4, pars 45-57; pg. 5, pars. 59-62 and 67-70; pg. 6, par 82; pg. 7, pars 92-93; EN: the privileges given to a user and privilege inheritance are the semantic data and the objects are the system commands. As understood from pg. 16, L13 to pg. 17, L2 of the specification of the instant application, the hierarchy represented in the graph tells if the user has permission to perform a task); c) expanding the system operating rules according to the allowable hierarchical semantic relationships between the available system command portions, to give, for any particular system operating rule, an additional system operating rule for each hierarchical semantic level in the graph structure below the

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system command present in the particular rule (**Moriconi**: pgs 3-4, pars. 44-58; pg. 5, pars 59-63; pg. 7, pars 92-93; EN: item 18 applies. Expanding not further defined. Evaluating the constraints (additional system operating rules) after a rule has been validated); d) comparing the expanded system rules to identify those rules for which a semantic conflict occurs therebetween (**Moriconi**: pgs 3-4, pars. 44-58; pg. 5, pars 59-63; pg. 6, par 77; pg. 7, pars 92-93; EN: evaluating the rules and the constraints to determine if access should be granted) (e) resolving any identified conflicts in the expanded set of initial rules to give a resolved expanded set of system operating rules (**Moriconi**: pgs. 5-6, pars 67-73; pg. 6, par. 82; pg. 7, pars. 88-93).; and (f) reducing the resolved expanded set of initial rules to canonical form to give an optimized set of system operating rules (**Moriconi**: pgs. 3-4, par. 45; pg 6, pars 73, and 79-80; pg. 7, pg. 7, pars. 88-93; EN: the optimized form of the policy rules)

### **Claim 6**

Moriconi anticipates operating a system applying the set of system operating rules generated by claim 4 in the system operation (**Moriconi**: abstract; pgs 3-4, pars. 44-58; pg. 5, pars 59-63; pg. 7, pars 92-93; EN: item 18 applies. Evaluating the rules to determine if access should be granted).

### **Claim 7**

Moriconi anticipates a computer storage medium containing a computer program or suite of programs arranged such that when executed by a computer it causes the

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computer to perform the method of claim 1 (**Moriconi**: pg. 3, pars 41-77; EN: see rejection of claim 1).

### **Claim 13**

Moriconi anticipates the processing means also reduces the resolved expanded set of initial rules to canonical form to give an optimized set of system operating rules (**Moriconi**: pgs. 3-4, par. 45; pg 6, pars 73, and 79-80; pg. 7, pg. 7, pars. 88-93; EN: the optimized form of the policy rules).

### **Claim 14**

Moriconi anticipates a system as in claim 12, which operates in accordance with the optimized set of system operating rules(**Moriconi**: abstract; pgs 3-4, pars. 44-58; pg. 5, pars 59-63; pg. 7, pars 92-93; EN: item 18 applies. Evaluating the rules to determine if access should be granted).

### **Claim 15**

Moriconi anticipates a system as in claim 13 which operates in accordance with the optimized set of system operating rules (**Moriconi**: abstract; pgs 3-4, pars. 44-58; pg. 5, pars 59-63; pg. 7, pars 92-93; EN: item 18 applies. Evaluating the rules to determine if access should be granted).

## **Response to Applicant's arguments**

13. The Applicant's arguments regarding the rejection under 35 USC 102 have been fully considered but are moot in view of new grounds of rejection.

### **Examination Considerations**

14. Examiner has cited particular columns and line numbers (or paragraphs) in the references applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the Applicant in preparing responses, to fully consider the references in their entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner. The entire reference is considered to provide disclosure relating to the claimed invention.

15. The claims and only the claims form the metes and bounds of the invention. "Office personnel are to give the claims their broadest reasonable interpretation in light of the supporting disclosure. In re Morris, 127 F.3d 1048, 105455, 44USPQ2d 1023, 1027-28 (Fed. Cir. 1997). Limitations appearing in the specification but not recited in the claim are not read into the claim. In re Prater, 415 F.2d, 1393, 1404-05, 162 USPQ 541, 550-551 (CCPA 1969)" (MPEP p 2100-8, c 2, I 45-48; p 2100-9, c 1, I 1-4). The Examiner has full latitude to interpret each claim in the broadest reasonable sense. Examiner will reference prior art using terminology familiar to one of ordinary skill in the art. Such an approach is broad in concept and can be either explicit or implicit in meaning.

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16. Examiner's Notes are provided with the cited references to prior art to assist the applicant to better understand the nature of the prior art, application of such prior art and, as appropriate, to further indicate other prior art that maybe applied in other office actions. Such comments are entirely consistent with the intent and spirit of compact prosecution. However, and unless otherwise stated, the Examiner's Notes are not prior art but a link to prior art that one of ordinary skill in the art would find inherently appropriate.

17. Unless otherwise annotated, Examiner's statements are to be interpreted in reference to that of one of ordinary skill in the art. Statements made in reference to the condition of the disclosure constitute, on the face of it, the basis and such would be obvious to one of ordinary skill in the art, establishing thereby an inherent prima facie statement.

18. Examiner's Opinion: items 15-17 apply. The claims and only the claims form the metes and bounds of the invention. The Examiner has full latitude to interpret each claim in the broadest reasonable sense.

### **Conclusion**

19. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Eshghi et al. US Patent #5,893,083

Shwartz US Patent #5,584,024

Axberg et al. US PGPUB #2003/0149769



Miller US Patent #5,265,221

20. Claims 1-7 and 9-15 are rejected.

***Correspondence Information***

21. Any inquires concerning this communication or earlier communications from the examiner should be directed to Omar F. Fernández Rivas, who may be reached Monday through Friday, between 8:00 a.m. and 5:00 p.m. EST. or via telephone at (571) 272-2589 or email [omar.fernandezrivas@uspto.gov](mailto:omar.fernandezrivas@uspto.gov).

If you need to send an Official facsimile transmission, please send it to (571) 273-2589.

If attempts to reach the examiner are unsuccessful the Examiner's Supervisor, David Vincent, may be reached at (571) 272-3080.

Hand-delivered responses should be delivered to the Receptionist @ (Customer Service Window Randolph Building 401 Dulany Street Alexandria, VA 22313), located on the first floor of the south side of the Randolph Building.

Omar F. Fernández Rivas  
Patent Examiner  
Artificial Intelligence Art Unit 2129  
United States Department of Commerce  
Patent & Trademark Office

/Omar F. Fernández Rivas/  
Examiner, Art Unit 2129  
Thursday, September 18, 2008.  
/David R Vincent/  
Supervisory Patent Examiner, Art Unit 2129

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